

REMARKS

Reconsideration and allowance of the subject application in view of the foregoing amendments and the following remarks is respectfully requested.

Claims 1-3, 6-7, 9-10, 12-19, 22-23, 25-27 are pending in the application. Claims 4, 11 and 24 have been cancelled without prejudice or disclaimer. The remaining claims have been amended, where appropriate, to better define the claimed invention. No new matter has been introduced through the foregoing amendments.

The Examiner's modified rejections are noted. Applicants respectfully traverse the rejections for at least the reasons detailed in the Amendment filed February 21, 2008 which are incorporated by reference herein. In the section below, Applicants will address the Examiner's Response to Applicant's Argument.

1. As to independent **claim 15**, the Examiner's response to Applicants teaching away argument is not understood. It appears to be the Examiner's argument that *Syndikus* was made after *Blenke* and therefore there was no way *Blenke* would know about *Syndikus* to teach away from *Syndikus*. Such is not a correct argument. The essence of Applicants' argument is that a person of ordinary skill in the art, looking at the disclosures of *Blenke* and *Syndikus*, would have found one, i.e., *Blenke*, teaching away from the Examiner's proposed combination with the other, i.e., *Syndikus*. As a result, the person of ordinary skill in the art would not have combined the references in the manner suggested by the Examiner.

2. As to independent **claim 1**, the Examiner has not responded to Applicants' argument that the Examiner's proposed combination of *Blenke*/*Syndikus* with *Herrmann* would have defeated the intended purpose of the *Blenke* vertical arrangement of guides 44/46 ¹ in the

¹ If proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984).

previous Amendment, at the paragraph bridging pages 10-11. Clarification is respectfully requested.

3. As to **claims 4 and 11**, it appears that the Examiner has again missed the essence of Applicants' argument. Applicants argued that, although *Uchida* discloses some materials which seem to be similar to the claimed materials, such materials are disclosed by *Uchida* to be applicable as sheet material. While a person of ordinary skill in the art might have used the *Uchida* materials for a sheet or panel, she would not have used the *Uchida* materials for a completely different structure, such as a swinging arm, in the absence of evidence that sheet material would perform equally well or better when applied to swinging arms or similar structures. Until and unless the Examiner can provide such evidence, Applicants respectfully submit that there is no reasonable expectation that the *Uchida* materials would have been successfully used for the arm in the *Blenke/Syndikus* combination (if at all proper).

4. As to **claims 22 and 23**, the Examiner has not provided any evidence in support of the Office's position that specific gravity and bending modulus are art-recognized result effective variables.² Although different arm lengths might result in different patterns, the art in general and *Blenke* in particular do not specifically teach or suggest that different specific gravity and bending modulus also achieved recognized results. Therefore, Applicants are not convinced that the claimed specific gravity and bending modulus ranges would have been discoverable through routine experimentation.

Accordingly Applicants respectfully submit that the final rejections are inappropriate and should be withdrawn.

MPEP, section 2143.01.V.

² "A particular parameter must first be recognized as a result-effective variable, i.e., a variable which achieves a recognized result, before the determination of the optimum or workable ranges of said variable might be characterized as routine experimentation." *In re Antonie*, 559 F.2d 618, 195 USPQ 6 (CCPA 1977) (emphasis added) discussed in *MPEP* section 2144.05.II.B.

Notwithstanding the above, Applicants have amended independent claims 1 and 15 to include further features that are neither disclosed, taught nor suggested by the applied references. Particularly, independent claim 1 now recites, among other things, that "said arm is formed from a composite material comprising carbon fiber..., and has a specific gravity of 1.5 to 1.8 and a bending modulus of 98 to 201 GPa ... [and is] oscillated, at a maximum angular acceleration of 15,000 rad/sec². The claimed arm structure of carbon fiber that has a specific gravity of 1.5 to 1.8 and a bending modulus of 98 to 201 GPa would not have been obvious over the art for the reasons detailed above with respect to points 3-4. The claimed arm structure is also non-obvious since it allows the claimed process to achieve a maximum angular acceleration of 15,000 rad/sec², a result unexpected from the art which fails to teach or suggest that such a high speed can be achieved in an elastic application process.

Accordingly, Applicants respectfully submit that amended independent claim 1 is patentable over the applied art of record.

Amended independent claim 15 includes similar limitations and should be considered patentable for at least the same reasons advanced with respect to claim 1.

The dependent claims are considered patentable at least for the reason(s) advanced with respect to the respective independent claim(s).

Accordingly, all claims in the present application are now in condition for allowance. Early and favorable indication of allowance is courteously solicited.

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The Examiner is invited to telephone the undersigned, Applicant's attorney of record, to facilitate advancement of the present application.

To the extent necessary, a petition for an extension of time under *37 C.F.R. 1.136* is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 07-1337 and please credit any excess fees to such deposit account.

Respectfully submitted,

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